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## Effectiveness of Rational Emotive Behavior Therapy for Emotional Dysregulation and General Mental Health Problems in Adolescents

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### ABSTRACT

The research studied the relationship between emotional dysregulation and general mental health problems in adolescents. It also assessed the effectiveness of the Rational Emotive Behavior Therapy REBT in enhancing emotional regulation and lowering the general mental health problems. The is a pre/posttest experimental design and 8 participants were selected out of a larger group of N(14) who were screened by Difficulties in Emotion Regulation Scale (Gratz, K.L. & Roemer, L; 2004) for emotional dysregulation and Strengths and Difficulties Questionnaire (Goodman, 2002) for general mental health problems. REBT sessions were used as the intervention in experimental group (Ellis, Dryden, & DiGiuseppe, 2007). The findings showed that there is moderate significant positive correlation between emotional dysregulation and general mental health problems. The results indicated that REBT has a remarkable impact in emotional regulation and is useful in alleviating overall mental health problems. The study implies implications of emotional regulation trainings to avoid mental health problems and utilization of REBT as an effective educational program to serve the purpose.

**Keywords:** Emotional Dysregulation, General mental health problems, REBT

### INTRODUCTION

Gross defined emotional miss- regulation as using an emotional regulation strategy that is ill-matched with the situation. (Gross, 2013). Hence Emotional dysregulation can be explained as “Unhealthy patterns of emotion that occurs due to usage of an emotional regulation strategy that is unsuited to the situation”. Emotional dysregulation also has a significant impact on establishing and conserving healthy social life which impacts an individual’s social adaptability, self-regulation

and self-esteem. The studies on emotional dysregulation have called attention towards the negative relationship between emotional dysregulation and psychological well-being. Study indicates that Emotional dysregulation affects the mental health and subjective wellbeing of an individual (Gross and Munoz, 1995; Taylor, 2004).

Adolescence is a stage which lasts from 10- 18 year's age of life. Salmela-Aro, K. (2011). It is the stage of physical, emotional and social transformation in which the adolescents undergo numerous physical and mental changes. When the puberty strikes many emotional changes occur as a result of hormonal changes and management of the emotions becomes challenging for the adolescents. Adolescence is a common period for the beginning of the psychopathology therefore it is significant to address the probable causes in adolescence age that may lead to the onset of mental health problems for the sake of prevention of increasing mental health issues in adolescents. Mental health problems as anxiety, depression, eating disorder and behavioral disorders are common in adolescent's age group. (WHO, October 2019) Emotional regulation is linked with development and it transforms with changes in the adolescence stage (Eisenberg et al. 2010; Gross 2013; Thompson & Goodman 2010).

As previous literature suggests Emotional dysregulation as a determining factor for general mental wellbeing. Emotional dysregulation is considered to be the source of various mental disorders. A study investigated the long-term relationships between emotional dysregulation and psychopathology in adolescents. The results revealed that Emotion dysregulation makes individuals susceptible to a wide range of mental disorders in adolescents' stage and therefore use of preventive measures in this stage is recommended. McLaughlin, K. A., Hatzenbuehler, M. L., Mennin, D. S., & Nolen-Hoeksema, S. (2011). Another study indicates emotional dysregulation may lead an individual to encounter severe negative affect, disturbed interpersonal relationships, health issues, behavioral problems and decreased flexibility to deal with stress (Aldao et al., 2010, 2015; Gross, 2007; Moore, Zoellner, & Mollenholt, 2008; Webb, Miles, & Sheeran, 2012).

Numerous studies have also investigated the relationship between emotional regulation skill deficit and development of anxiety disorders(Aldao & Nolen-Hoeksema, 2012 ; Aldao et al., 2010 ; Amstadter, 2008 ; Berking & Wupperman, 2012 ; Campbell-Sills, Ellard, & Barlow, 2014 ; Cisler, Olatunji, Feldner, & Forsyth, 2010 ; Kashdan, Zvolensky, & McLeish, 2008 ; Suveg, Morelen, Brewer, & Thomassin, 2010).

Studies have shown that difficulties in emotional regulation in adolescents are often correlated with depression, anxiety disorders and behavioral problems (Garnefski et al., 2001; McLaughlin et al., 2011). As the patterns of emotional dysregulation are commonly identified in various psychopathologies in DSM. The problematic emotional regulation can be a cause of disturbed mental wellbeing in adolescents. Research indicates a correlation between depression, utilization and quality of regulation strategies to modulate negative emotions in adolescents.

(Garber, Braafladt, & Weiss, 1995; Silk, Steinberg, & Morris, 2003). Studies revealed that female adolescents with eating disorders lacks understanding of emotions and have problems in regulation of negative emotions. (Sim & Zeman, 2005, 2006).

Learning to manage emotions is an important skill that makes an individual flexible and capable to deal with emotionally evocative situations. Studies suggests that emotional regulation paves the way for psychological well-being and helps in effective dealing with untoward life experiences (Gross & John, 2003; Aldao et al., 2010; Troy et al., 2010, 2013; Luhmann et al., 2012; DeSteno et al., 2013; Schwager and Rothermund, 2014; Koole et al., 2015a).

REBT has proven to be effective with students in problem solving, managing anger and anxiousness that hinders problem solving (DiGiuseppe, 1990). Various REBT based intervention can be implemented to help adolescents manage their emotions at home and at the school. A study revealed significant effect of (REBT) in schools to help students develop essential life skills. Eifediyi, G., Ojugo, A. I., & Aluede, O. (2018). Literature review suggests that REBT is effective in helping students work on their emotional and behavioral problems by structured groups or lessons (Banks & Zionts, 2009; DiGiuseppe, 1990; Morris, 1993).

As the literature suggests the management of emotions in adolescence can prevent adolescents from developing impulsive behaviours, destructive behaviors and emotional problems by improving the overall mental health of the adolescents. Ogundele M. O. (2018).

Despite the significance of adolescents' mental health, it remains unaddressed in research area of Pakistan. According to the UNDP Pakistan has a huge youth population which can serve as both asset and disaster depending upon how this population is dealt with. If psychological wellbeing is not prioritized and support programs are run in Pakistan for adolescents it will result in brain drain.

The research in long term aims to bring attention towards the need of teaching emotional regulation to the adolescents in schools and colleges under the curriculum of life skills course; which will improve their quality of life and general mental health and eventually prevent the adolescents from various psychopathologies. The finding of this research will help in improving the psychological well-being of the students and will foster new techniques that teachers, life skills instructors and counsellors can employ to enhance the emotional regulation of the students and prevent them from psychological distress and general mental health problems which can lead to psychopathologies.

Furthermore it is suggested that Children and adolescents who possess adequate emotion regulation skills are socially competent, they are able to maintain quality relationships, and indulge in higher levels of prosocial behavior than those who are not able to regulate their emotions and lack regulation skills (Denham, 1986; Denham et al., 2003; Denham, McKinley, Couchoud, & Holt, 1990; Eisenberg, et al., 1993; Eisenberg et al., 1995; Hubbard & Coie, 1994; Rydell, Berlin, & Bohlin, 2003; Spinard et al., 2006). In order to train our young generation, we need to foster social competency, Quality of life, resilience, self-regulation and emotional stability by the

help of various support and educational programs. As emotional regulation is linked with general mental health problems, different therapeutic intervention as school programs have been introduced in the schools and colleges to promote the wellbeing of the adolescents in Western and pan Asian population.

The finding of this research will help in improving the bringing attention towards techniques that teachers, life skills instructors and counsellors can employ to enhance the emotional regulation of the students and prevent them from psychological distress and psychopathologies in adolescence. Strong emotional regulation skills will not only prevent the occurrence of mental disorders but it will also help in sustaining healthy social relationships, efficiency at work and better overall health in the adolescents.

### **Model of Present Study**

The theoretical framework of the study is built on (Gratz and Roemer, 2004) competency-focused model, defining emotional regulation as “the

- a) cognition of emotions
- b) acceptance of emotions
- c) capability to regulate behaviors and behave according to the desired goal even in unexpected situation
- d) ability to utilize emotional regulation strategies as per the demands of the situation

Study suggests, having difficulties in utilizing the emotional regulation strategy according to the situation, will lead to mental health problems. Emotional dysregulation which is difficulty in any of the four facets would contribute to the development of emotional, conduct and hyperactivity problems. Not being able to regulate emotions would negatively effect socialization further creating peer problems leading to general mental health problems.

REBT will work by teaching emotional and behavioral techniques. It will create understanding of appropriate use of emotional regulation strategies as per the demands of the situation which will result in decrease of mental health problems by improvisation in emotional regulation.

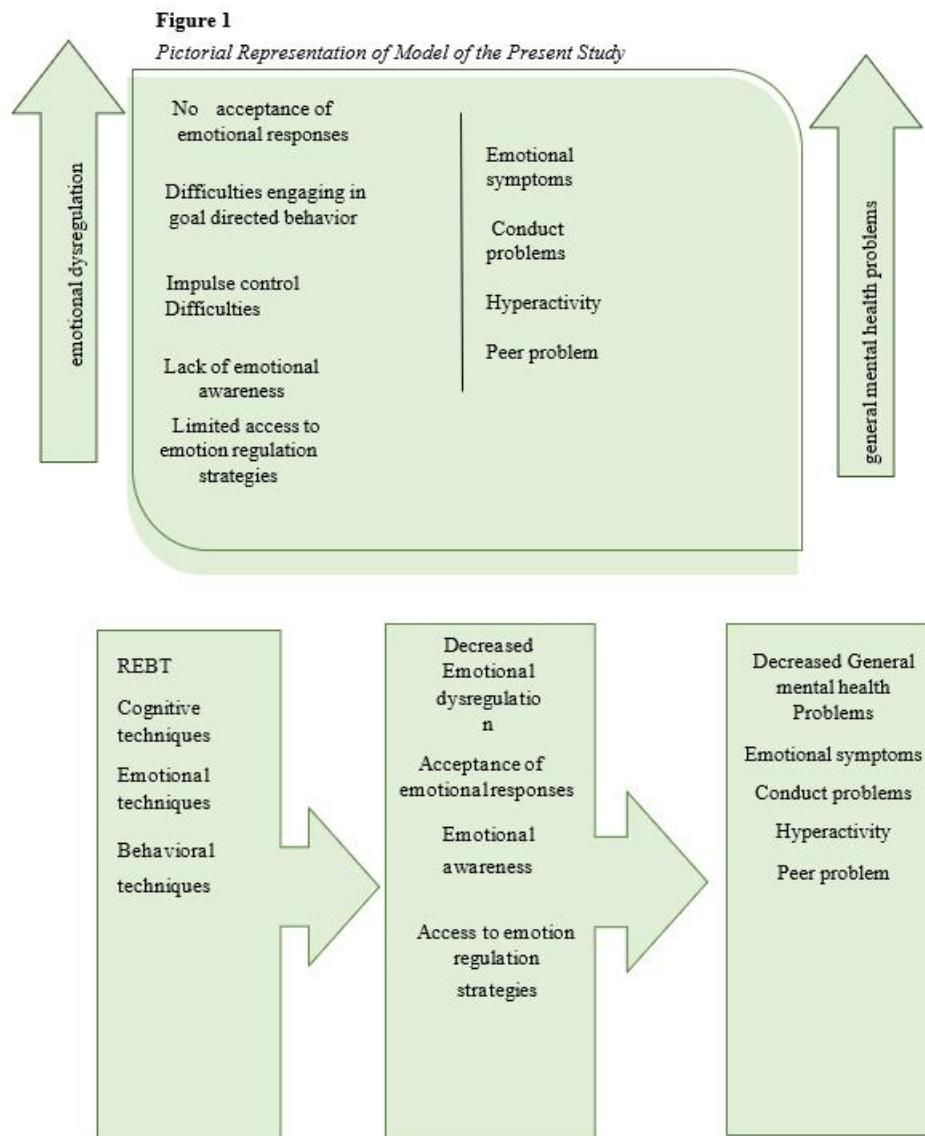
### **Research Objective**

- To explore if there is a positive relationship between emotional dysregulation and general mental health problem in adolescents.
- To assess the effectiveness of Rational Emotive Behavior Therapy REBT in regulation of emotions.
- To assess the effectiveness of Rational Emotive Behavior Therapy REBT in alleviation of general mental health problems.

### **Hypotheses**

- There will be a positive relationship between emotional dysregulation and general mental health problems in adolescents.
- There will be a decrease in scores of emotional dysregulation of adolescents in posttest experimental group

- There will be a decrease in scores of general mental health problems in adolescents in posttest experimental group



## Method

### Research Design

The present study applied the pre and posttest experimental design.

### Sample

The sample included N=14 participants within age range 16-17years (M = 16.3, SD= 0.267) through purposive sampling who were then screened by Difficulties in Emotion Regulation Scale (Gratz, K.L. & Roemer, L.,2004) and The Strengths and Difficulties Questionnaire (Goodman, 2002) to screen for emotional dysregulation and general mental health problems. Eight participants (4 males, 4 females) met the criteria of inclusion which were then inducted in the study. All the participants were college level HSC students who were ready to undertake therapy.

## **Materials**

### **Demographic Form**

The demographic information sheet yielded the information about the participant's age, background and education.

### **Measures**

#### **Difficulties in Emotion Regulation Scale (DERS)**

Emotional dysregulation will be measured by Difficulties in Emotion Regulation Scale (DERS) (Gratz, K.L. and Roemer, L) (2004) which is a 36-item questionnaire. It has six scales: 1. No acceptance of emotional responses (NONACCEPTANCE) 2. Difficulties engaging in goal directed behavior (GOALS) 3. Impulse control difficulties (IMPULSE) 4. Lack of emotional awareness (AWARENESS) 5. Limited access to emotion regulation strategies (STRATEGIES) 6. Lack of emotional clarity (CLARITY). The scores range from 36 -180 where high scores indicate difficulty in emotional regulation. The scale has high internal consistency ( $\alpha = 0.93$ ), good test-retest reliability ( $\rho_1 = 0.88$ ,  $p < 0.01$ ).

#### **The Strengths and Difficulties Questionnaire (SDQ) (Robert Goodman 2002)**

The Strengths and Difficulties Questionnaire (SDQ) (S) 11-17 Self-Report Measure was applied that consisted of 25 items based on 5 scales. These scales are 1) Emotional symptoms subscale, 2) Conduct problems subscale, 3) Hyperactivity/inattention subscale, 4) Peer relationships problem subscale and 5) Prosocial behavior subscale. The summary scores are added to get total difficulty score.

Total Score = Emotional Scale + Conduct Scale + Hyperactivity Scale + Peer Problem Scale.

Total Difficulties Score 0-15 shows nearly average difficulty - clinically significant problems in this area are not likely, 16-19 shows slightly raised difficulty which may reflect clinically significant problems and 20-40 shows substantial risk of clinically significant problems. The reliability is typically good, as assessed either by internal consistency (mean Cronbach  $\alpha$ : .73), or retest stability at 4 to 6 months (mean: 0.62). The SDQ scores at or above the 90th percentile were associated with a significantly increased likelihood of independently identified psychiatric conditions (mean odds ratio: 15.7 parent scales, 15.2 teacher scales, 6.2 youth scales).

### **Procedure**

In the first phase of the study, Fourteen participants with problems were screened for emotional dysregulation by Difficulties in Emotion Regulation Scale (DERS) (Gratz, K.L. and Roemer, L) (2004) and for general mental health problems by Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2002) questionnaire out of which N=8 participants who scored high on emotional dysregulation and had difficulty in mental wellbeing were inducted in the study.

The experimental group and control group comprised of (N=04 subjects in each group). After the pre-test, 07 sessions of Rational Emotive Behaviour therapy REBT techniques were applied on experimental group in individual sessions in a

student counselor setup. The REBT session plan was adopted and tailored according to the client's needs from (Ellis, Dryden, & DiGiuseppe, 2007). Participants of both groups, those who received the therapy (experimental group) and those who did not receive therapy (waiting list control group) were evaluated through post-test.

### **Session 1**

#### **Aims & Objectives:**

- Introduction to the therapy
- Psycho-education about the ABC model and the outline of the REBT.
- The therapy was used as an assessment procedure.
- Understand the relationship between the unhealthy emotions and irrational beliefs that lead to behavioral complications.

### **Session 2**

- Introduction to irrational beliefs and their consequences
- Identify and report their self-defeating cycles and their irrational beliefs.
- Disputing the irrational beliefs.

### **Session 03**

- Disputing the irrational beliefs and replace it with rational beliefs and identify the new effects resulting from the rational beliefs.
- Use coping self-statements.

### **Session 4**

#### ***Aims & Objectives***

- Shame attacking exercises and were taught unconditional self-acceptance.
- Rational emotive imagery was used. The shame attacking exercise helped the participants to get rid of their self-limiting beliefs and facilitated self-acceptance in the participants.
- Self-compassion letter activity
- Assertiveness, accepting own mistakes, doing what makes the participant happy regardless of approval of others.
- Reframing was used with the participants by making them write down the advantages of making oneself uncomfortable in order to overcome low frustration tolerance.

### **Session 5**

- "Stay in there" activities (Grieger & Boyd, 1980)
- Kelly's fixed role therapy was employed in which the client had to "act as if" they think rationally while staying in the similar feelings that cause discomfort to them.

### **Session 6**

- Anti-procrastination activities
- Breaking the habit
- Engage in previously delayed task due to

### **Post intervention test Session 7**

A feedback follow-up was obtained from the clients followed by the post-test. A feedback was given to the client about their progress and efforts were encouraged.

### Ethical Consideration

The study prioritized the ethical code of conduct. Informed consent was obtained from the participants in which they were introduced to the study and informed about their rights to withdraw without penalty. Participants have been protected from any probable harm and distress in the study. Their personal information has been kept confidential and their privacy has been respected.

## RESULTS

### Descriptive Analysis of the Scales

**Table 1:**

Descriptive Analysis of the SDS

	<i>Tests</i>	<i>N</i>	<i>Items</i>	<i>M</i>	<i>SD</i>	<i>α</i>	<i>SK</i>	<i>K</i>
<i>SDS</i>	Pretest	8	20	9.15	3.08	.53	-.71	.28
	Posttest	8	20	6.15	2.8	2.8	-.4	-.23

*Note.* K = Kurtosis; SK = Skewness

It is the sum of pre-test and post-test of experimental and control group study. The pre-test mean score is 9.15 and post-test mean score is 6.15, and this means that the score of total difficulty has reduced after the intervention given to the experimental group. The Standard deviation of pre-test is 3.08 and post-test is 2.8. The skewness value is -0.71 and post-test is -0.4, the kurtosis value in pre-test is 0.28 and post-test is -0.23. These values indicate that data is normally distributed. The value of Cronbach alpha of SDS is 0.53 in pre-test and 2.8 in post-test indicating that the scale has acceptable reliability.

**Table 2:**

Descriptive Analysis of the DERS

	<i>Tests</i>	<i>N</i>	<i>Items</i>	<i>M</i>	<i>SD</i>	<i>A</i>	<i>SK</i>	<i>K</i>
<i>DERS</i>	Pretest	8	36	14.5	2.77	0.54	-.15	-.95
	Posttest	8	36	22.3	2.89	0.13	.40	.33

*Note.* K = Kurtosis; SK = Skewness

Table 2 depicts the sum of pre-test and post-test of experimental and control group study. The average of the pre-test and post-test is 14.5 and 22.3 respectively meaning that the score of total difficulty has improved after the intervention which

is because of the slight increase in emotional dysregulation in the control group who did not receive therapy as observed in table 06. The pre-test Standard deviation is 2.77 and post-test 2.89. Skewness has a value of -1.5 in pre-test and 0.4 in post-test and the value of kurtosis in pre-test is -0.95 and in post-test is 0.33. The data is normally distributed as shown by these values. The Cronbach alpha of SDS is 0.54 in pre- test and 0.13 in post- test which indicates the reliability of the scale is within acceptable range.

**Table 3:**

Correlation between emotional dysregulation and general mental health problem

	<i>E regulation</i>
<i>M.H problem</i>	.418*

Table shows the moderate positive significant relationship between emotional dysregulation and general mental health problems with a significance of 0.5 level. This indicates a rise in general mental health problems with increase of emotional dysregulation in adolescents.

**Table 4:**

Paired sample t-test showing the comparison of pretest posttest emotional dysregulation in experimental group before and after therapy (N=4)

<i>Variable</i>	<i>Pre-test</i>		<i>Post-test</i>		<i>t(df)</i>	<i>P</i>	<i>95%CL</i>		<i>g</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>UL</i>	<i>LL</i>	
<i>Emotional dysregulation</i>	130	2.38	70.7	26.3	-4.4(3)	0.02	-17.2	-102	3.1

*Note.* CI=Confidence interval; UL=Upper limit; LL=Lower limit

It presents the value of mean, standard deviation, confidence interval with lower limit and upper limits values of experimental group. It also presents the values of Hedges' g. The mean value of emotional dysregulation in pretest of experimental group is 130 that is high and the mean value in posttest of the same group is 70.7 that is low. The p-value is  $p=0.00 < t$ , shows that there is a large significant difference in mean scores of pre-test and post-test of emotional dysregulation. This suggests that intervention was effective in alleviating general mental health problems.

**Table 5:**

Paired sample t-test showing the comparison of pretest posttest emotional deregulation in control group before and after therapy (N=4)

<i>Variable</i>	<i>Pre-test</i>		<i>Post-test</i>		<i>t(df)</i>	<i>P</i>	<i>95%CL</i>		<i>g</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>UL</i>	<i>LL</i>	

<i>Emotional dysregulation</i>	120	6.0	130	11.5	1.2(3)	0.2	34.8	-14.8	1.09
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Note. CI=Confidence interval; UL=Upper limit; LL=Lower limit

Table shows that the mean value of emotional dysregulation in pretest of control group is 120. The mean of value in posttest of the same group is 130. This suggests that both scores fall in the high category of emotional dysregulation in adolescents. The scores have increased a bit in posttest but the difference is relatively small so we can say that there is no difference between the scores of pre-test and post-test in control group. This indicates that REBT training provided to experimental group was successful as the students who received training had scored different in pretest and posttest.

**Table 6:**

Independent sample t-test showing the comparison of posttest scores of emotional dysregulation among experimental and control groups (N=8)

<i>Post test</i>	<i>Experimental group Control</i>						<i>95%CL</i>		<i>r</i>
	<i>group</i>								
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t(df)</i>	<i>P</i>	<i>UL</i>	<i>LL</i>	
<i>Emotional dysregulation</i>	70.7	26	130	11.5	-4.1(6)	.006	-24.8	-95.15	2.9

The above table shows the comparison of emotional dysregulation scores of experimental group and control group in posttest. Experimental group has mean score 70.7 in posttest whereas control group has mean score 130 in posttest. The p-value of posttest is less than 0.05 (p=0.006) which shows that there is a significant difference in the results of both, the experimental and control group in post-tests, that is, students who received the REBT intervention experienced a decrease in emotional dysregulation as compared to those who didn't receive the intervention. Thus, this verifies the hypothesis.

**Table 7:**

Pretest and posttest scores of mental health problems among experimental and control groups (N=8)

<i>M.H</i>	<i>Pretest</i>			<i>Post test</i>			<i>95% CL</i>			
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>P</i>	<i>t(df)</i>	<i>UL</i>	<i>LL</i>
<i>Experimental</i>	4	24.2	1.5	4	10.2	1.5	0.02	-4(3)	-2.9	-25.0
<i>Control</i>	4	21.5	4.4	4	20.5	4.3	0.51	-7(3)	3.3	-5.3

*Paired Sample T-Test*

It gives the mean, standard deviation, confidence interval, lower limit and upper limits values of experimental and control group. It also gives the values of Hedges g. The average score of general mental health problems of experimental group in pretest is 24.2 and the average value of same group in posttest is 10.2. This implies that the score of general mental health problems has reduced in posttest because of the intervention given. The average of the mental health problems of control group in pretest is 21.5 and the average of the same group in posttest is 20.5. The difference is comparatively very small hence we can say that there is no difference. The p- value of experimental group is less than 0.05 (p=0.02). The p-value of control group is 0.51 more than 0.05. These values demonstrate that the difference between the mean scores of pre- test and post-test of general mental health problems in experimental group is considerable. On the contrary, no significant difference between the scores of pre-test and post-test of general mental health problems in control group.

**Table 8: Independent sample t-test showing the comparison of mental health problems Posttest scores of among experimental and control groups (N=8)**

<i>Post test</i>	<i>Experimental group Control</i>				<i>95%CL</i>				
	<i>group</i>		<i>group</i>		<i>t(df)</i>	<i>P</i>	<i>UL</i>	<i>LL</i>	<i>r</i>
<i>M.H</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
	10.2	5.9	20.5	4.3	-2.7(6)	.03	-1.21	-19.2	1.9

*independent sample t-test*

Table shows the average of general mental health problems, standard deviation, p value and cohen d value of posttest of experimental group and control group. The average of the mental health problems is 10.2 in posttest of the experimental group and the average in the posttest of the control group is 20.5. The p-value is 0.03 which is less than 0.05 which indicates the significance of the finding. The difference between the results of both, experimental and control group in post-tests is very big. It implies that the general mental health issues are elevated in the

control group compared to the experimental one. The general mental health problems of adolescents receiving the REBT as an intervention were reduced as compared to those who did not receive the intervention.

## DISCUSSION

The first hypothesis assumed that there will be a positive correlation between emotional dysregulation and general mental health problems in adolescents. It has been proven through statistical analysis, in result section indicates, correlation value .418. The p-value is 0.02 that is less than  $p=0.05$  proves the significance of finding. In adolescents, persistence difficulty in regulating the negative emotions lead to psychopathology. Finding suggested that lack of emotional regulation skills lead to the expansion and persistent anxiety disorders (Aldao & Nolen-Hoeksema, 2012; Aldao et al., 2010) The study concludes that clinical conditions are associated with emotional regulation. Impairment in regulation causes clinical symptoms, syndromes, and disorders. Different regulatory systems are associated with different disorders. When an emotional shift is very quick it leads to maniac symptoms, when an emotional shift is delayed it causes depression (Sheppes, Suri and Gross, 2015). Furthermore, low emotional regulation that is gradual and not present when needed, results in social anxiety that makes an individual fearful of evaluation (Rodebaugh, 2006).

Another study shows that almost all patients with psychiatric disorders have common themes of selecting strategies that are problematic to regulate emotions as well as executing the problematic strategies (Jazaieri et al., 2013). These above-mentioned previous researches provide the evidence for the current study hypothesis that emotional regulation and pathological tendencies in adolescents are connected.

The second hypothesis anticipated that REBT will be effective in the regulation of emotions in Adolescents. The paired sample t-test and independent t-test showed that the emotional dysregulation has decreased in the posttest experimental group ( $t= -4.4$ ,  $df=3$ ,  $p<0.05$ ). Whereas the emotional dysregulation remained the same in the control group ( $t=1.2$ ,  $df=3$ ,  $p>0.05$ ) and they scored high in the posttest as compared to experimental.

There are numerous factors that contribute to the pathological tendencies especially in Adolescents. During this stage, individuals go through many physical, emotional, hormonal and neural changes. Other than biological stress, they go through societal pressures and situational stress as well. It includes peer pressure, distress over getting good grades, unable to manage anger issues, relationship issues. Another important factor is academic pressure. Research shows that academic pressure leads to stress, anxiety and suicidal thoughts in young adults and adolescents (Ghatol, 2017 & Nguyen et al, 2013). Literature review also reveals that anxiety (panic, agoraphobia), depression and other disorders that begin to increase in adolescence, continues to increase into early adulthood. Transition of puberty in adolescence affects the social, emotional, and sexual development of individuals (Hayward, 2003).

Due to the above-mentioned factors, it is important to work on the Adolescents population and their emotional regulation to alleviate the chances of psychopathologies in them. Another important reason to work on their emotional regulation is to facilitate their emotional growth and development. It would also prevent them to develop any psychological or psychiatric disorder.

The current study chooses the sessional plan of Rational Emotive Behavioral Therapy (REBT) to effectively deal with the regulation of emotions in adolescents. This includes ABC model, psycho- education on self-defeating behaviors, understanding irrational beliefs and replacing them with

rational beliefs using the disputing technique. Participants were also taught self-coping statements as well as writing letters of self-compassion. Rational emotive imagery techniques and other techniques of REBT were also used. Participants were given opportunities to analyze the cost and benefits of unhelpful behavior. Researches have shown these techniques to be effective for emotional regulation in Adolescents (Ellis, 1997; Ellis & Dryden, 2007). These sessions were effective in regulating emotions of adolescents as well as alleviating psychopathologies that leads us to our third hypothesis.

Our third hypothesis anticipated that REBT will be effective in alleviating psychopathological tendencies in Adolescents. The paired sample t-test and independent t-test showed that the mental health problems have decreased in the posttest experimental group ( $t = -4$ ,  $df = 3$ ,  $p < 0.05$ ). Whereas the mental health problems remained the same in the control group ( $t = -.7$ ,  $df = 3$ ,  $p > 0.05$ ). Hence table 8 provides the evidence that REBT is effective in alleviating psychopathological tendencies in Adolescents.

Individual sessions of REBT were provided to all the participants of the experimental group. The findings of the research verified that individual sessions of REBT are effective. They give immediate and long-term results (Saelid & Nordahl, 2016). Individual sessions were chosen to be suitable for participants as it required a complete understanding of an individual and his problems. Studies have also verified that REBT is effective in the management of emotions in adolescents (Ellis, 2000). Several psychological problems, behavioral problems and disorders such as conduct disorder have been effectively dealt with using REBT with school-aged children (DiGiuseppe, 1990). As the researchers suggest the management of emotions in adolescence can prevent adolescents from impulsive behaviors, destructive behaviors and psychopathology, therefore, various intervention should be implemented to help adolescents manage their emotions at home and at the school. The results confirmed that there is a strong negative relationship between emotional regulation and psychopathological tendencies in Adolescents. Moreover, the study also confirms REBT as an effective tool in decreasing mental health problems by increasing emotional regulation in adolescents.

## CONCLUSION

The current study revealed that healthy emotional regulation in adolescents

is essential for mental health. Failure to develop emotional regulation will lead to problems in maintaining healthy social and occupational functioning leading towards occurrence of symptoms of mental disorders impacting the overall general mental health. Moreover, the psychoeducative programs such as REBT therapy in educational settings can help adolescents learn emotional regulation strategies, empowering the adolescents to deal with emotionally evocative situations and impulse control difficulties which contributes to general mental health in adolescents.

#### **Implications:**

The finding provides evidence that emotional dysregulation in adolescents leads to general mental health problems and REBT educative technique is found to be relevant with the culture of Pakistan and therefore it is recommended that REBT psychoeducative training should be incorporated in curriculums to help the adolescence develop essential life skills and ability to regulate their emotions and behaviors, it can be very fruitful for adolescence already dealing stress issues and emotional issues. It is further suggested that such psychoeducative trainings as intervention programs should be initiated for the mental wellbeing of the adolescents.

#### **Limitation and recommendation**

The study suggests some limitations and recommendations. Foremost for an intervention study the sample size is small and increasing the sample size in future researches can improve the ecological validity of the results. The participants were only from college years whose stress differs from school years adolescents so comparison can be done by including school year adolescents. Gender differences in emotional dysregulation and related mental health problems should be explored in so that Future studies can consider different therapeutic techniques as psychoeducative training to develop social skills and emotional regulation in adolescents.

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